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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/586,587	07/20/2006	Patrick Gloeckner	287295US0PCT	7386	
OBLON SPIX	7590 06/25/200 / AK MCCLELLAND	9 MAIER & NEUSTADT, P.C.	EXAMINER		
1940 DUKE STREET			NERANGIS, VICKEY MARIE		
ALEXANDRI	A, VA 22314		ART UNIT PAPER NUMBER		
			1796		
			NOTIFICATION DATE	DELIVERY MODE	
			06/25/2009	EL ECTRONIC	

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Application No. Applicant(s) GLOECKNER ET AL. 10/586,587

Office Action Summary						
omoc Action Cummary	Examiner	Art Unit				
	VICKEY NERANGIS	1796				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	idress			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of min may be available under the provisions of 37 CFR 1.12  - If NO period for reply is specified above, the maximum statutory period of the poly within the set or extended period for reply will be set or extended period for reply with 15 yet abute, Any reply received by the Office later than three months after the mailing earned patter term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  nely filed  the mailing date of this of (35 U.S.C. § 133).	•			
Status						
1) Responsive to communication(s) filed on	_					
2a) This action is FINAL. 2b) ☐ This	action is non-final.					
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the	e merits is			
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>2-27 and 30-33</u> is/are pending in the a	application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>2-27 and 30-33</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) □ acce		Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	ected to. See 37 C	FR 1.121(d).			
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P	TO-152.			
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 H.S.C. 8 119(a)	-(d) or (f)				
a) ⊠ All b) □ Some * c) □ None of:	priority under 50 G.O.O. § 110(a)	(a) or (i).				
1.☐ Certified copies of the priority documents	s have been received					
2.☐ Certified copies of the priority documents		on No				
Copies of the certified copies of the prior			Stane			
application from the International Bureau	•	o iii uno i tationa	olago			
* See the attached detailed Office action for a list		d.				
	,					
Attachment(s)						
Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) X Information Disclosure Statement(s) (FTO/SE/08)	5] Notice of Informal P	atent Application				

4) Interview Summary (PTO-413)		
Paper No(s)/Mail Date		
Notice of Informal Patent Application		
6) Other:		
	Paper No(s)/Mail Date  5) Notice of Informal Patent Application	

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :7/20/06, 11/27/06, 5/21/07, 8/2/07, 12/19/07, 7/11/08.

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#### DETAILED ACTION

#### Claim Objections

1. Claims 3-6, 17, 25, and 26 are objected to because of the following reasons:

With respect to claims 3, 4, and 6, the term "further" in "further hydroxyl-functionalized polymer" is unneeded because the polymer is not being further limited given that it is introduced as a new ingredient in claim 3 that does not need to be further limited.

With respect to claim 5, it is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 3 already requires that (A) and/or (B) is reacted polymer-analogously with (C).

With respect to claim 17, penultimate line, the first "and" should be removed in order to have proper Markush language.

With respect to claim 25, last line, the comma should be deleted.

With respect to claim 26, line 4, the "or" should be deleted and "and" should be replaced with "or" so that proper alternative Markush language is recited.

Appropriate correction is required.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 2-27 and 30-33 are rejected under 35 U.S.C. 112, second paragraph, as being
indefinite for failing to particularly point out and distinctly claim the subject matter which
applicant regards as the invention.

With respect to claim 2, 3, 5, 6, and 10-18, the step of "polymer-analogously reacting" is indefinite because it is not made clear in the claim or in the specification as originally filed what this means. It is not understood what a polymer-analogous step is intended to encompass.

With respect to claim 3, it is not clear whether the further hydroxyl-functionalized polymer is part of component (C) or it is only intended to react with (A) and/or (B). Confusion arises from claim 6 requiring that the (A) and/or (B) forms an adduct with further hydroxyl-functionalized polymer.

With respect to claim 27, line 4, the term " $M_n$ " is not defined in the claim or the specification. Typically, the term " $M_n$ " represents number-average molecular weight, however, such as not been made clear in the specification.

With respect to claims 4, 7-9, 19-26, and 30-33, they are rejected for being dependent on a rejected claim.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

 Claims 2, 7-20, 27, 32, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Lange (US 5,962,582).

Lange discloses a composition suitable for inks, adhesives, coatings (col. 1, lines 12-22) which is prepared by mixing and reacting hydroxyl-functional synthetic resins such as ketone/aldehyde and/or urea/aldehyde and polycarboxylic acid such as maleic acid (col. 3, line 38). The resins include cyclohexanone/trimethylcyclohexanone-formaldehyde resin and urea-formaldehyde/isobutraldehyde resin (col. 3, lines 8-21). Additives such as filler and pigment are also taught (col. 5, lines 2-3).

In light of the above, it is clear that Lange anticipates the presently cited claims.

 Claims 2, 3-6, 8, 9, 11, 13, 14, 21, 27, and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Schunck (US 5,739,214).

Schunck discloses a coating composition (i.e., insulant or sealant for optical disks) that is prepared and exemplified by mixing cyclohexanone-formaldhyde condensation resin (component A), propxylated glycerol esterified with acrylic acid (component C), epoxy resin (further hydroxyl-functionalized polymer) (Example 1, col. 7, line 63 to col. 8, line 25); polyester acrylate (additional polymer to form varnish). In this exemplified composition is also a polyester ester which also functions as a further hydroxyl-functionalized polymer as discussed in col. 4, line 4-60. Additives include plasticizers and leveling agents (col. 6, line 66 to col. 7, line 4).

In light of the above, it is clear that Schunck anticipates the presently cited claims.

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 Claims 2, 15-18, 21, 23, 25, 27, 32, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Prantl et al (US 6.096,797).

Prantl et al discloses a radiation-curable binder for printing ink which is prepared by mixing a urea-aldehyde condensation resin (component B) (col. 4, lines 52-57) with a radiation-curable compound such as (meth)acrylate compounds (component A). Suitable (meth)acrylate compounds include reaction products of (meth)acrylic acid and bifunctional alcohols (such as propylene glycol) and diisocyanates to form urethane (meth)acrylates) (col. 3, line 1 to col 4, line 2). In example 1, 30 parts by weight of resin derived from urea and butyraldehyde is mixed with 70 parts by weight of polyether acrylate and pigment to form an ink (col. 6, lines 1-16).

In light of the above, it is clear that Prantl et al anticipates the presently cited claims.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 22, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over
   Prantl et al (US 6,096,797) in view of Hodakowski et al (US 4,260,703).

The discussion with respect to Prantl et al in paragraph 5 above is incorporated here by reference.

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While Prantl et al teaches urethane (meth)acrylates that are prepared from poly- or diisocyanates (col. 3, lines 66-67), it fails to disclose specific poly- or diisocyanates like presently claimed.

Hodakowski et al discloses urethane-acrylate radiation curable compositions made from hydroxyalkyl acrylate and polyisocyanate (abstract) such as 3,5,5-trimethyl-1-isocyanato-3-isocyanattomethylcyclohexane (i.e., isophorone diisocyanate), 2,4-tolylene diisocyanate, and cyclohexane diisocyanate (col. 3, lines 18-35).

Given that Prantl discloses the use of urethane (meth)acrylates that are prepared from diisocyanates and further given that Hodakowski et al teaches that urethane-acrylates suitable in radiation curable compositions include those like presently claimed and discussed above, it would have been obvious to one of ordinary skill in the art to utilize the diisocyanates of Hodakowski et al in the urethane-(meth)acrylate-containing radiation curable composition of Prantl et al.

#### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701.
 The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/23/2009 vn

/Vickey Nerangis/ Examiner, Art Unit 1796